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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,316	07/26/2001	Stuart Corr	P 281549 CHAP2/50746/US	4954

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EXAMINER

MCAVOY, ELLEN M

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/912,316	CORR ET AL.	
	Examiner Ellen M McAvoy	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,9-11,13-15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,9-11,13-15 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>10</u> . | 6) <input type="checkbox"/> Other: |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 9-11, 13-15, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reyes-Gavilan et al (5,866,030).

Reyes-Gavilan et al ["Reyes-Gavilan"] disclose fluid refrigeration compositions comprising a hydrocarbon lubricant, an immiscible refrigerant, and an additive capable of reducing the interfacial tension between the hydrocarbon lubricant and refrigerant. The fluid refrigeration composition may comprise a mixture of hydrocarbon lubricant such as an alkylbenzene oil and polyol ester lubricant in a weight ratio of polyol ester to hydrocarbon lubricant from about 1:99 to 1:3. See the claims. The polyol ester comprises polyhydric alcohol ester of monocarboxylic acids containing 4-25 carbon atoms. Suitable polyhydric alcohols include neopentyl alcohol, trimethylol ethane, trimethylol propane and pentaerythritol. See column 6, lines 4-17. Suitable refrigerants include 1,1,1,2-tetrafluoroethane or R134a. See column 4, lines 8-37. The additive which reduces the interfacial tension may be an anionic fluorohydrocarbon surfactant such as fluorohydrocarbon phosphites, phosphates, carboxylates and sulfonates. See column 4, lines 38-58, and the claims. The additive may be present in the composition in a concentration of 0.001 to 5 parts by weight per 100 parts by weight lubricant. See claim 1. Reyes-Gavilan teaches that the composition can be used in refrigeration and air

conditioning systems with "potential oil return difficulties". Although the reference does not describe the surfactant component as an anti-deposition component which inhibits deposition and/or removes deposits of unwanted residues, Reyes-Gavilan teaches that the aim of the composition is to facilitate oil return to the compressor by making the refrigerant and hydrocarbon lubricant more dispersible with each other, thus allowing the refrigerant to wash the lubricant off the inner surfaces of the heat exchangers. See column 3, lines 51-60. Thus, the examiner is of the position that the fluid refrigeration compositions of Reyes-Gavilan meet the limitations of the composition and method claims when the synthetic lubricant contains a polyol ester. Applicants' open-ended claim language "comprising" and "containing" allow for the addition of other additives to the composition such as the hydrocarbon lubricant component of the prior art.

The claim rejections under 35 U.S.C. 103(a) as being unpatentable over Glova (4,556,496), Reyes-Gavilan et al (5,792,383), Magid et al (4,755,316) and Schnur et al (5,906,769) made in the previous office action are withdrawn in view of applicants' amendments and remarks.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


Art Unit: 1764

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M McAvoy whose telephone number is (703) 308-2510. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (703) 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Ellen M McAvoy
Primary Examiner
Art Unit 1764

EMcAvoy
June 17, 2003